



RESEARCH IMMERSION RIMSE SUMMER SCHOOLS

Training opportunities for graduate, undergraduate, high school, and post-graduate students

The RIMSE are immersive, hands-on six-week programs meant to prepare trainees to work in MRSEC-affiliated research labs. RIMSE engage a wide range of participants—from high school students to post-doctoral researchers and industry partners.

SILICON NANOTECHNOLOGY


The focus of this RIMSE Summer School is to prepare, characterize, and exploit the properties of photonic crystals, thin films, nanoparticles, and quantum dots prepared from mesoporous silicon. Led by Professor Michael Sailor, the course provides training on synthesis and characterization of these materials.

ENGINEERED LIVING MATERIALS

This RIMSE Summer School aims to engineer living systems to generate new polymeric materials. Led by Professor Jonathan Pokorski, the course offers an introduction to skills relevant to synthesis, fabrication, and genetic modification of engineered living materials.

PREDICTIVE ASSEMBLY

This RIMSE Summer School focuses on understanding how nanoscale building blocks can be assembled into functional, tunable materials that operate at the meso- to macroscales. Led by Professor Tod Pascal, the course provides training on the computational aspects of the self-assembly problem.



Application Deadline: May 1, 2022 // Learn more: mrsec.ucsd.edu/rimse

PROGRAM INFORMATION

(for all RIMSE Summer Schools)

June 21 - August 12, 2022. If access to the labs is still restricted (due to COVID-19 guidelines), activity may be partially or completely virtual.

Course Elements

- Lectures
- Hands-On Laboratory/Computational Training
- Shadowing/Mentoring by Faculty, Postdoctoral, and Graduate Students
- Capstone "Discovery" Project – an independent research project implemented by a team of trainees under the mentorship of a current research group member

Logistics

- Full immersion program from Tuesday, June 21 to Friday, August 12
- Schedule: Monday – Friday, 9:00am – 4:00pm
- Tutorials (lecture, in-lab demonstrations, student presentations), Monday, Wednesday, Friday, 9:00am – 11:00am
- The remainder of the time is spent in the laboratory working on the course experimental modules and the Discovery Projects.
- Location: UC San Diego, Main Campus.

Application Process

Applications are considered on a rolling basis until May 1, 2022. Please submit the following materials to the email addresses given above:

- Letter of Interest
- Resume
- Up to 3 letters of reference

Financial Support

There is no charge for participation in this program. However, all participants must have their own support for travel, living expenses, health insurance, and any applicable visa fees (the university charges a \$425 visa processing fee). Financial assistance is available for participation in this program through the UC San Diego MRSEC: Undergraduate students are eligible for support from the UC San Diego MRSEC REU program; incoming graduate students are eligible for support from the UC San Diego MRSEC RIMSE program. On-campus housing can be provided, as needed.

Application Deadlines: May 1, 2022

For questions, please contact mrsec@ucsd.edu